The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. In an appliance with a relatively stationary component and a rotatable vessel for holding a supply of material, a method comprising:

charging said vessel with said supply of material;

rotating said vessel about an axis;

rapidly accelerating said rotation of said vessel;

determining an amount of energy with which said vessel has engaged said relatively stationary part following a start of said rapid acceleration;

comparing said amount of energy with a predetermined value; and

sending a signal indicative of an unbalance condition if said amount of energy exceeds said predetermined value.

2. The method of claim 1, wherein said appliance is an automatic washing machine.

3. The method of claim 2, wherein said washing machine is a vertical axis washer.

4. The method of claim 2, wherein said washing machine is a horizontal axis washer.

5. The method of claim 1, wherein said appliance is a clothes treating appliance and said material comprises a fabric load.

6. The method of claim 1, wherein said relatively stationary component comprises a cabinet of said appliance.

7. The method of claim 1, wherein said step of determining an amount of energy comprises rotating said vessel with an electric motor, measuring a current supplied to said motor, isolating a frequency of said current relating to said engagement of said vessel with said relatively stationary part and generating a curve representing said frequency, comparing said frequency with a curve representing a reference motor current, integrating areas above said reference curve within said engagement curve, and accumulating said areas for a predetermined time.

8. The method of claim 7, wherein said step of comparing comprises comparing said accumulated area value with a predetermined threshold value.

9. An appliance comprising:

a vessel mounted for rotation about an axis, configured to receive a supply of material and arranged relative to a relatively stationary part of said appliance whereby said vessel will engage said relatively stationary part in a severe unbalance loading condition of said material in said vessel while said vessel is rotating;

a control arranged and configured to rapidly accelerate a rotation of said vessel, determine an amount of energy with which said vessel has engaged said relatively stationary

part, compare said amount of energy with a predetermined value, and send a signal indicative of an unbalance condition if said amount of energy exceeds said predetermined value.

10. An appliance according to claim 9, wherein said appliance is an automatic washing machine.

11. An appliance according to claim 10, wherein said washing machine is a vertical axis washer.

12. An appliance according to claim 10, wherein said washing machine is a horizontal axis washer.

13. An appliance according to claim 9, wherein said appliance is a clothes treating appliance and said material comprises a fabric load.

14. An appliance according to claim 9, wherein said relatively stationary component comprises a cabinet of said appliance.

15. An appliance according to claim 9, including an electric motor drivingly connected to said rotatable vessel.

16. An appliance according to claim 15, wherein said electric motor comprises a controlled induction motor and an inverter is provided in the control connected to the motor,

said control further comprising a current measuring device connected to a dc bus of said inverter.

17. An appliance according to claim 16, wherein said current measuring device provides an output signal representative of the current used by said motor, said control further including a digital filter connected to receive said output signal, said digital filter including a running average algorithm and providing an output representative of an average current used by said motor.

18. An appliance according to claim 9, wherein said signal comprises one of an audible and visible signal to a user.

19. An appliance according to claim 9, wherein said signal comprises an electrical signal transmitted to a further part of said control.

20. An appliance having a rotatable vessel configured to receive a supply of material mounted within a relatively stationary housing, said vessel rotatable about an axis and said vessel being mounted in a fashion such that it is movable relative to said housing in a direction perpendicular to said axis, comprising:

an electrical motor drivingly connected to said rotatable vessel,

a control operatively connected to said motor and configured to rapidly accelerate a rotation of said vessel through operation of said motor, determine an amount of energy with which said vessel has engaged said relatively stationary part as reflected by a characteristic of electrical current drawn by said motor, compare said amount of energy with a predetermined

value, and send a signal indicative of an unbalance condition if said amount of energy exceeds said predetermined value.

Sub 91